DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-019754 Address: 333 Burma Road **Date Inspected:** 19-Dec-2010

City: Oakland, CA 94607

OSM Arrival Time: 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: Oiu Wen **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No N/A **Delayed / Cancelled:**

Bridge No: 34-0006 **Component:** OBG

Summary of Items Observed:

On this day CALTRANS OSM Quality Assurance (QA) Inspector Umesh Gaikwad was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

OUTSIDE YARD, OBG Cross Beam (CB) 17

This QA Inspector performed verification Ultrasonic Testing (ABF Request No: 11182010-2) in accordance with ABF/CT Pattern "D" UT Procedure 001 Revision 1. All recordable Indications if found were recorded on a separate data sheet that Caltrans QA generates after performing a joint inspection with ABF ultrasonic testing personnel. The location of the inspection was identified as weld between Deck Panel (DP) to Side Panel (SP) at west side of Cross Beam (CB) 17. The weld designations were as;

CB3001A-017-014 [DP TO SP (WEST)]

This Quality Assurance (QA) Inspector observed the following work in progress:

Bay 14

OBG Seg 13AW:

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Repair welding of weld joint no: SEG3013P-312 [Floor Beam (FB) 3177 to stiffener of Bottom Plate, complete joint penetration (CJP) weld at panel point (PP) 118]. The welder is identified as 045221 and was observed welding in the 3G position. Welding process was identified as Shielded Metal Arc Welding (SMAW). ZPMC QC was identified as Mr. Sun Tian Ling. The welding variables recorded by this QC appeared to comply with Welding Procedure Specification (WPS): 345-SMAW-3G(3F)-FCM-Repair. Repair welding was done as per Welding Repair Report (WRR): B-WR 19060 Rev-0.

Repair welding of weld joint no: SEG3013P-302 [Floor Beam (FB) 3177 to stiffener of Bottom Plate, complete joint penetration (CJP) weld at panel point (PP) 118]. The welder is identified as 045221 and was observed welding in the 3G position. Welding process was identified as Shielded Metal Arc Welding (SMAW). ZPMC QC was identified as Mr. Sun Tian Ling. The welding variables recorded by this QC appeared to comply with Welding Procedure Specification (WPS): 345-SMAW-3G(3F)-FCM-Repair. Repair welding was done as per Welding Repair Report (WRR): B-WR 19058 Rev-0.

Repair welding of weld joint no: SEG3013D-219 [Floor Beam (FB) 3174A to Floor Beam (FB) 3194A, complete joint penetration (CJP) weld at panel point (PP) 119.65]. The welder is identified as 066163 and was observed welding in the 1G position. Welding process was identified as Shielded Metal Arc Welding (SMAW). ZPMC QC was identified as Mr. Qiu Wen. The welding variables recorded by this QC appeared to comply with Welding Procedure Specification (WPS): 345-SMAW-1G(1F)-FCM-Repair. Repair welding was done as per Welding Repair Report (WRR): B-WR 19212 Rev-0.

Vertical Plate, 13BW to 13CW

The Flux Cored Arc Welding (FCAW) process on weld joint no: OBW13AD-002 [Vertical Plate (VP) 3013 to Vertical Plate (VP) 3015, CJP weld; near PP122]. The welder is identified as 201583 and was observed welding in the 3G position. ZPMC QC was identified as Mr. Zhang Lin. The welding variables recorded by QC appeared to comply with WPS: B-T-2233-ESAB.

OBG Seg 14W

The Flux Cored Arc Welding (FCAW) process on weld joint no: SEG3020D-035 [Floor Beam (FB) 3343 to Longitudinal Diaphragm (LD) 3051A, CJP weld]. The welder is identified as 045175 and was observed welding in the 3G position. ZPMC QC was identified as Mr. Zhu Lin. The welding variables recorded by QC appeared to comply with WPS: B-T-2233-ESAB.

The Flux Cored Arc Welding (FCAW) process on weld joint no: SEG3020E-053 [Floor Beam (FB) 3343 to Longitudinal Diaphragm (LD) 3048A, CJP weld]. The welder is identified as 021215 and was observed welding in the 3G position. ZPMC QC was identified as Mr. Zhu Lin. The welding variables recorded by QC appeared to comply with WPS: B-T-2233-ESAB.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

Summary of Conversations:

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Only general conversation was held between QA and QC concerning this project.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang: 15000422372, who represents the Office of Structural Materials for your project.

Inspected By:	Gaikwad,Umesh	Quality Assurance Inspector
Reviewed By:	Patterson,Rodney	QA Reviewer